

FORM PTO-1449
(Rev. 2-32)U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

Serial No.

02-1239-A
(Formerly Atty Docket
No. TRVZ 20014P)

09/756,071

INFORMATION DISCLOSURE
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Applicant:

Name Karl Tryggvason

Filing Date:

Group:

January 8, 2001

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U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
<i>GA</i>	1.	6,294,356	9/25/01	Jones, et al.			

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
<i>GA</i>	2.	WO 00/26342	5/11/00	PCT			x	
<i>↓</i>	3.	WO 00/34441	6/15/00	PCT			x	
<i>↓</i>	4.	WO 01/87239	11/22/01	PCT			x	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

<i>GA</i> <i>↓</i>	5.	Aberdam et al., (1994), Nature Genetics, "Herlitz's junctional epidermolysis bullosa is linked to mutations in the gene (LAMC2) for the $\gamma 2$ subunit of nicein/kalinin (LAMININ-5)", Vol: 6: pp. 299-304.
	6.	Amano, et al., (2000), The Journal of Biological Chemistry, "Bone morphogenetic protein 1 is an extracellular processing enzyme of the laminin 5 $\gamma 2$ chain", Vol: 275(30), pp. 22728-22735.
	7.	Anderson, et al., (2001), The Laryngoscope, "Tumor deposition of laminin-5 and the relationship with perineural invasion", Vol: 111, pp. 2140-2143.
	8.	Calaluce, et al., (2001), Molecular Carcinogenesis, "Laminin-5-mediated gene expression in human prostate carcinoma cells", Vol: 30, pp. 119-129.


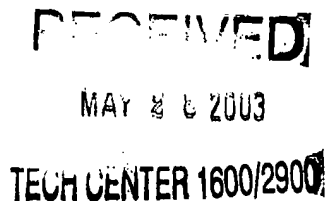
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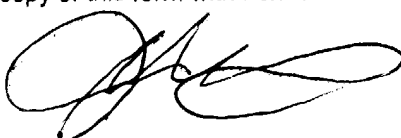
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		Group: # 1645	


OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

	9. Davis, et al., (2001), The Prostate, "Unique expression pattern of the $\alpha 6 \beta 4$ integrin and Laminin-5 in human prostate carcinoma", Vol: 46, pp. 240-248.
	10. Engvall, et al., (1990), Cell Regulation, "Distribution and isolation of four laminin variants; tissue restricted distribution of heterotrimers assembled from five different subunits", Vol: 1, pp. 731-740.
	11. Fukushima, et al., (2001), Mod. Pathol., "Expression of laminin-5- $\gamma 2$ chain in intraductal papillary-mucinous and invasive ductal tumors of the pancreas", Vol: 14(5), pp. 404-409.
	12. Gianelli, et al., (1997), Science, "Induction of Cell Migration by Matrix Metalloprotease-2 Cleavage of Laminin-5", Vol: 277, pp. 225-228.
	13. Gianelli and Antonaci, (2001), Clinical and Experimental Metastasis, "Biological and Clinical Relevance of Laminin-5 in Cancer", Vol: 18, pp. 439-443.
	14. Goldfinger, et al., (1998), J. Cell Biol., "Processing of Laminin-5 and its functional consequences: Role of Plasmin and Tissue-type Plasminogen Activator", Vol: 141, pp. 255-265.
	15. Gonzales, et al., (1999), Mol. Biol. of the Cell, "A cell signal pathway involving laminin-5, $\alpha 3 \beta 1$ integrin, and mitogen-activated protein kinase can regulate epithelial cell proliferation", Vol: 10, pp. 259-270.
	16. Grassi, et al., (1999), Journal of Cell Science, "The SFL activity secreted by metastatic carcinoma cells is related to laminin 5 and mediates cell scattering in an integrin-independent manner", Vol: 112, pp. 2511-2520.
	17. Haas, et al., (2001), The Journal of Histochemistry & Cytochemistry, "A comparative quantitative analysis of laminin-5 in the basement membrane of normal, hyperplastic, and malignant oral mucosa by confocal immunofluorescence imaging", Vol: 49(10), pp. 1261-1268.
	18. Habermann, et al., (2001), Scand J. Gastroenterol, "Ulcerative colitis and colorectal carcinoma", Vol: 7, pp. 751-758.
	19. Hao, et al., (1996), American Journal of Pathology, "Differential expression of laminin 5 ($\alpha 3 \beta 3 \gamma 2$) by human malignant and normal prostate", Vol: 149(4), pp. 1341-1349.
	20. Heagerty, et al., (1986), Lancet, "GB3 monoclonal antibody for diagnosis of junctional epidermolysis bullosa", Vol: 860, page 8485.
	21. Heagerty, et al., (1987), British J. Dermatol, "Raid prenatal diagnosis of epidermolysis bullosa letalis using GB3 monoclonal antibody", Vol: 17, pp. 271-275.
	22. Hellman, et al., (2000), Int. J. Gynecol. Cancer., "Cancer of the vagina: Laminin-5 $\gamma 2$ chain expression and prognosis", Vol: 10, pp. 391-396.
	23. Henning, et al., (1999), Histopathology, "Loss of laminin-5 in the epithelium-stroma interface: an immunohistochemical marker of malignancy in epithelial lesions of the breast", Vol: 34, pp. 305-309.


EXAMINER 	DATE CONSIDERED 8/03
--------------------------------------------------------------------------------------------------------	--------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

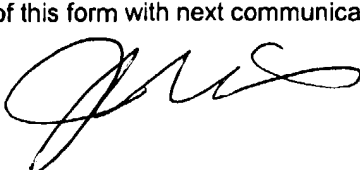
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RECEIVED MAY 28 2003 TECH CENTER 1600/2900		Group: # 1645	

24.	Hlubek, et al., (2001), Cancer Research, "Expression of the invasion factor laminin γ 2 in colorectal carcinomas is regulated by β -catenin", Vol: 61, pp. 8089-8093.
25.	Hsi, et al., (1986), J. Reprod. Immunology, "Monoclonal antibodies to human amnion", Vol: 9, pp. 11-21.
26.	Kagesato, et al., (2001), Japan J. Cancer Research, "Sole expression of laminin γ 2 chain in invading tumor cells and its association with stromal fibrosis in lung adenocarcinomas", Vol: 21, pp. 184-192.
27.	Katoh, et al., (2002), Oncology, "Correlation between laminin-5 γ 2 chain expression and epidermal growth factor receptor expression and its clinicopathological significance in squamous cell carcinoma of the tongue", Vol: 62, pp. 318-326.
28.	Kallunki, et al., (1992), J. Cell Biol., "A truncated laminin chain homologous to the B2 chain: Structure, spatial expression, and chromosomal assignment", Vol: 118, pp. 679-693.
29.	Koshikawa, et al., (1999), Cancer Research, "Overexpression of laminin γ 2 chain monomer in invading gastric carcinoma cells", Vol: 59, pp. 5596-5601.
30.	Lenander, et al., (2001), Analytical Cellular Pathology, "Laminin-5 γ 2 chain expression correlates with unfavorable prognosis in colon carcinomas", Vol: 22, pp. 201-209.
31.	Lohi, et al., (2000), APMIS, "Basement membrane laminin-5 is deposited in colorectal adenomas and carcinomas and serves as a ligand for α 3 β 1 integrin", Vol: 108, pp. 161-172.
32.	Lugassy, et al., (1999), J. Cutaneous Pathol., "Tumor microvessels in melanoma express the beta-2 chain of laminin. Implications for melanoma metastasis", Vol: 26, pp. 222-226.
33.	Määttä, et al., (2001), The Journal of Histochemistry & Cytochemistry, "Comparative analysis of the distribution of laminin chains in the basement membranes in some malignant epithelial tumors: The α 1 chain of laminin shows a selected expression pattern in human carcinomas", Vol: 49(6), pp. 711-725.
34.	Määttä, et al., (1999), Journal of Pathology, "Expression of the laminin γ 2 chain in different histological types of lung carcinoma. A study by immunohistochemistry and <i>in situ</i> hybridization", Vol: 188, pp. 361-368.
35.	Manda, et al., (2000), Biochemical and Biophysical Research Communications, "Differential expression of the LAMB3 and LAMC2 genes between small cell and non-small cell lung carcinomas", Vol: 275, pp. 440-445.
36.	Marinkovich, et al., (1992), JBC, "The anchoring filament protein kalinin is synthesized and secreted as a high molecular weight precursor", Vol: 267, pp. 17900-17906.
37.	Martin, et al., (1998), Mol. Med., "Down-regulation of laminin-5 in breast carcinoma cells", Vol: 4(9), pp. 602-613.
38.	Matsui, et al., (1995), J. Invest. Dermatology, " γ 2 chain of Laminin-5 is recognized by Monoclonal Antibody GB3", Vol: 105, pp. 648-652.
39.	Matsui, et al., (1995), JBC, "The Assembly of Laminin-5 Subunits", Vol: 270(40), pp. 23496-23503.
40.	McMillan, et al., (1997), Br. J. Dermatol., "Immunohistochemical analysis of the skin in junctional epidermolysis bullosa using laminin 5 chain specific antibodies is of limited value in predicting the underlying gene mutation", Vol: 136, pp. 817-822.

EXAMINER 	DATE CONSIDERED 8/03
--------------------------------------------------------------------------------------------------------	--------------------------------

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TECH CENTER 1600/2900

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1645

41. Mizushima, et al., (1998), Horm. Res., "Wide Distribution of Laminin-5 γ chain in basement membranes of various human tissues", Vol: 50 (Suppl. 2), pp. 7-14.
42. Mizushima, et al., (1996), J. Biochem., "Differential expression of laminin-5/ladsin subunits in human tissues and cancer cell lines and their induction by tumor promoter and growth factors", Vol: 120, pp. 1196-1202.
43. Moriya, et al., (2001), Cancer, "Increased expression of laminin-5 and its prognostic significance in lung adenocarcinomas of small size", Vol: 19(6), pp. 1129-1141.
44. Niki, et al., (2002), American Journal of Pathology, "Frequent co-localization of cox-2 and laminin-5 γ 2 chain at the invasive front of early-stage lung adenocarcinomas", Vol: 160(3), pp. 1129-1130.
45. Nordemar, et al., (2001), Anticancer Research, "Laminin-5 as a predictor of invasiveness in cancer *in situ* lesions of the larynx", Vol: 21, pp. 509-512.
46. Nordstrom, et al., (2002), Int. J. Gynecol., "Laminin-5 γ 2 chain as an invasivity marker for uni- and multifocal lesions in the lower anogenital tract", Vol: 12, pp. 105-109.
47. Ono, et al., (2002), Cancer Letters, "Epidermal growth factor receptor gene amplification is correlated with laminin-5 γ 2 chain expression in oral squamous cell carcinoma cell lines", Vol: 175, pp. 197-204.
48. Patarroyo, et al., (2002), Cancer Biology, "Laminin isoforms in tumor invasion, angiogenesis and metastasis", Vol: 12, pp. 197-207.
49. Patel, et al., (2002), Int. J. Cancer, "Laminin- γ 2 overexpression in head-and-neck squamous cell carcinoma", Vol: 99, pp. 583-588.
50. Pyke, et al., (1994), American Journal, "The γ 2 chain of kalinin/laminin 5 is preferentially expressed in invading malignant cells in human cancers", Vol: 145(4), pp. 782-791.
51. Pyke, et al., (1995), Cancer research, "Laminin-5 is a marker of invading cancer cells in some human carcinomas and is coexpressed with the receptor for urokinase plasminogen activator in budding cancer cells in colon adenocarcinomas", Vol: 55(18), pp. 4132-4139.
52. Rouselle, et al., (1991), J. Cell Biol., "Kalinin: an epithelium-specific basement membrane adhesion molecule that is a component of anchoring filaments", Vol: 114(3), pp. 567-576.
53. Rouselle, et al., (1994), J. Cell Biol., "Kalinin is more efficient than laminin in promoting adhesion of primary keratinocytes and some other epithelial cells and has a different requirement of integrin receptors", Vol: 125, pp. 205-214.
54. Salo, et al., (1999), Matrix Biol., "Laminin-5 promotes adhesion and migration of epithelial cells: identification of a migration-related element in the γ 2 chain gene (LAMC2) with activity in transgenic mice", Vol: 18, pp. 197-210.
55. Salo, et al., (1999), Acta Univ. Oul.D 540, "Laminin-5: Function of the γ 2 chain in epithelial cell adhesion and migration, and expression in epithelial cells and carcinomas" Doctoral Dissertation.
56. Seftor, et al., (2001), Cancer Research, "Cooperative interactions of laminin 5 γ 2 chain, matrix metalloproteinase-2, and membrane type-1-matrix/metalloproteinase are required for mimicry of embryonic vasculogenesis by aggressive melanoma", Vol: 61, pp. 6322-6327.

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DATE CONSIDERED

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RECEIVED
 MAY 28 2003
 TECH CENTER 1600/2900

57.	Skyldberg, et al., (1999), Journal of the National Cancer Institute, "Laminin-5 as a marker of invasiveness in cervical lesions", Vol: 91(21), pp. 1882-1887.
58.	Soini, et al., (1996), Journal of Pathology, "Expression of the laminin γ 2 chain in pancreatic adenocarcinoma", Vol: 180, pp. 290-294.
59.	Sordat, et al., (1998), J. Pathol., "Differential expression of laminin-5 subunits and integrin receptors in human colorectal neoplasia", Vol: 185, pp. 44-52.
60.	Sordat, et al., (2000), Int. J. Cancer, "Tumor cell budding and Laminin-5 expression in colorectal carcinoma can be modulated by the tissue micro-environment", Vol: 88, pp. 708-717.
61.	Takahashi, et al., (2002), Cancer, Cytoplasmic Expression of Laminin γ 2 Chain Correlates with Postoperative Hepatic Metastasis and Poor Prognosis in Patients with Pancreatic Ductal Adenocarcinoma", Vol: 94(6), pp. 1894-1901.
62.	Tani, et al., (1997), American Journal of Pathology, "Pancreatic carcinomas deposit laminin-5 preferably adhere to laminin-5, and migrate on the newly deposited basement membrane", Vol: 151(5), pp. 1289-1302.
63.	Tsuji, et al., (2002), Clinical & Experimental Metastasis, "Regulation of melanoma cell migration and invasion by laminin-5 and α 3 β 1 integrin (VLA-3)", Vol: 19, pp. 127-134.
64.	Tunggal, et al., (2002), American Journal of Pathology, "Defective laminin 5 processing in cylindroma cells", Vol: 160(2), pp. 459-468.
65.	Vailly, et al., (1994), Eur. J. Biochem., "The 100-kDa chain of nicein/kalinin is a laminin B2 chain variant", Vol: 219, pp. 209-218.
66.	Verrando, et al., (1987), Exp. Cell Res., "Monoclonal antibody GB3, a new probe for the study of human basement membranes and hemidesmosomes", Vol: 170, page 116-128.
67.	Verrando, et al., (1991), Lab. Investigation, "Monoclonal antibody GB3 defines a widespread defect of several basement membranes and a keratinocyte dysfunction in patients with lethal junctional 4perdermolysis bullosa", Vol: 64, pp. 85-92.
68.	Yamamoto, et al., (2001), Clinical Cancer Research, "Expression of the γ 2 chain of Laminin-5 at the invasive front is associated with recurrence and poor prognosis in human esophageal squamous cell carcinoma", Vol: 7, pp. 896-900.

EXAMINER 	DATE CONSIDERED 8/03
---------------------	-----------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

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